

**ABSTRACT**

**IMPROVEMENTS RELATING TO THE OPERATION OF AN ENGINE**

This invention relates to a method of operating an engine and, particularly to a method of determining the pressure of a working gas within a Stirling engine of a domestic combined heat and power unit relative to a pre-defined pressure. The present invention provides a method of determining the pressure of a gas within an engine relative to a pre-defined pressure of the gas, comprising measuring the power factor of electricity generated by the engine, comparing the measured power factor with a power factor determined to correspond to the power factor of electricity generated by the engine when operating at the pre-defined pressure and determining whether the measured power factor is less than the determined power factor. Variations in measured power factors may also be used to indicate faults in the engine.

**Appendix**